

REMARKS

The present amendments are in response to the Office Action mailed on March 31, 2003. Claims 1, 9, and 16 have been amended, and claims 1-20 are currently pending.

Reconsideration of the application is respectfully requested in view of the above amendments to the claims and the following responsive remarks. For the Examiner's convenience and reference, the Applicants' remarks are presented in the order in which the corresponding issues were raised in the Office Action.

In the Office Action, the following rejections were made:

- (1) claims 7 and 14 were rejected under 35 U.S.C. 112, second paragraph,
as being indefinite;
- (2) claims 1-20 were rejected under 35 U.S.C. 103(a) as being
unpatentable over U.S. Pat. No. 5,833,744 (Breton).

I. Rejections Under 35 U.S.C. 112, Second Paragraph

The Examiner has rejected claims 7 and 14 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention. In response to this rejection, the Applicants respectfully assert the identified terms "Direct Black 51," "Direct Black 109," "Direct Blue 199," "Direct Red 9," "Direct Red 32," and "Acid Blue 185" are each terms that are well known to those skilled in the art. It is not believed that the identification of exact structures is required to satisfy the requirements of 35 U.S.C. 112, second paragraph. All that is required is that one skilled in the art would understand the scope of the invention. These six rejected terms are well known to those skilled in the art, and each of these substances has a CAS Registry Number, which is listed as follows: Direct Black 51 is assigned Registry Number 34977-63-4; Direct Black 109 is assigned Registry Number 61814-72-0; Direct Blue 199 is assigned Registry Number 12222-04-7; Direct Red 9 is assigned Registry Number 61724-94-5; Direct Red 32 is assigned Registry Number 33448-68-9; and Acid Blue 185 is assigned Registry Number 12234-64-9. As evidence for this, the registry sheets for each of these terms are enclosed herewith. Withdrawal of this rejection is thus, respectfully requested.

II. Rejections Under 35 U.S.C. 103(a)

Before discussing the obviousness rejections herein, it is thought proper to briefly state what is required to sustain such a rejection. The issue under § 103 is whether the PTO has stated a case of *prima facie* obviousness. According to the MPEP § 2142, the Examiner has the burden and must establish a case of *prima facie* obviousness by showing some motivation in a prior art reference to modify that

reference to teach all the claim limitations in the instant application. The Applicants respectfully assert the Examiner has not satisfied the requirement for establishing a case of *prima facie* obviousness in these rejections.

The Examiner has rejected claims 1-20 under U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,833,744 (Breton). The Applicants have amended claims 1, 9, and 16 to clarify that the high molecular weight polysaccharide that is used is also an aerosol formation reducing polysaccharide. The amendments to claims 1, 9, and 16 are supported by the specification, which identifies that certain high molecular weight polysaccharides have aerosol formation reducing properties (pg. 9, ln. 20 through pg. 10, ln. 11). It is the use of these polysaccharides that is claimed.

Breton teaches an inkjet ink with excellent waterfastness on paper (col. 3, ln. 65-67), by having a paper pulp debonding agent, which is a mixture of cationic and nonionic moieties (col. 14, ln. 25-31). The reference also indicates that a polymeric chemical additive, such as a polysaccharide, may be present from 0 to 10% in the ink composition (col. 11, ln. 13-29). However, Breton does not teach inkjet ink compositions with reduced aerosol formation during printing. Further, it is not known if the polysaccharides would have this property, especially when formulated with a paper pulp debonding agent, which could increase aerosol formation. Breton also does not teach any method or system for reducing satellite spotting around a printed image. By the lack of addressing the issues of aerosol formation reduction or reducing satellite spotting around a printed image, and without undue experimentation, it is not known if any formulation of Breton would be acceptable for aerosol formation reduction.

The instant claimed invention identifies the formation of aerosol upon printing as a problem to be solved, which Breton fails to do. This problem is solved by a formulation that includes an aerosol formation reducing high molecular weight polysaccharide in an amount from 5 to 200 ppm. Also, the instant application teaches a method and a system for the reduction of aerosol formation as a means for reducing satellite spotting around a printed image. None of these problems and/or solutions are even addressed by Breton.

As a result, the Applicants respectfully assert Breton lacks elements of the claim limitations in the instant invention. Specifically, Breton does not teach using aerosol formation reducing high molecular weight polysaccharides, including these polysaccharides in a limited range from 5 to 200 ppm, or reducing satellite spotting around an image. Accordingly, the Examiner has not established a case of *prima facie* obviousness. Thus, the Applicants respectfully request withdrawal of the rejections.

In addition to the Applicants assertion that a *prima facie* case of obviousness has not been met, the Applicants also object to the Examiner's modification of Breton, as the teachings therein are devoid of any teaching of an inkjet ink composition having reduced aerosol formation properties, or reduced satellite spotting around printed images. The Courts have stated that the prior art must teach or suggest the making of modifications to the prior art in order to render a claimed invention obvious. *In re Gordon*, 221 USPQ 1125, 1127 (Fed. Cir. 1984). In other words, one must be motivated by the prior art to make the modifications necessary to arrive at the instant invention. *In re Vaeck*, 947 F.2d 488, 493 (Fed. Cir. 1991). Absent such motivation, a rejection based on a modification of a reference is unsupported, and any rejection based on such a modification must be withdrawn.

The Applicants respectfully assert the teachings of Breton do not address the problem of aerosol formation reduction solved by the instant invention. Also, the Applicants respectfully assert the formulation of Breton is a distinct composition containing elements that may interact with a polysaccharide for providing excellent waterfastness, and not necessarily in a manner that has an aerosol formation reducing effect, thereby not functioning similarly as the instant claimed invention. In the first place, the instant claims are only drawn to the use of polysaccharides that have an aerosol reducing effect. Secondly, the amount of polysaccharide to be used is within a very narrow band of weight percent (expressed in ppm), i.e., from 5-200 ppm. Thus, there is nothing in Breton to guide one of ordinary skill in the art to reduce aerosol formation for the purpose of reducing satellite spotting around printed images.

In addition to the fact that there is no motivation to modify the reference cited, the Applicants assert that the Examiner has used the Applicants' own specification as a roadmap for the proposed modifications to Breton. The Courts have stated that the Applicant's specification cannot be the basis for motivation, i.e., no hindsight reconstruction. *Yamanouchi Pharmaceutical Co., Ltd. v. Danbury Pharmacal, Inc.*, 231 F.3d 1339, 56 U.S.P.Q.2d 1641 (Fed. Cir.), reh'g denied, 2000 U.S. App. LEXIS 34047 (2000). Accordingly, the use of Applicants' specification to provide the teaching for using an aerosol formation reducing high molecular weight polysaccharide, including the polysaccharide in an amount from 5-200 ppm, and a method/system for reducing satellite spotting around a printed image, is not permissible and any rejection based on hindsight must be withdrawn.

To illustrate that hindsight analysis has been used to reconstruct the invention, the Applicants assert that one of ordinary skill in the art would be required to follow a three-tiered modification scheme to address a problem to be solved, none of which is

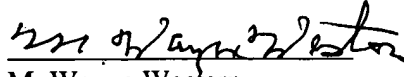
identified in Breton. First, the skilled artisan would have to review Breton and specifically select a single substance from a laundry list of polymeric chemical additives to be used for reducing aerosol formation, i.e., polysaccharide. Second, the skilled artisan would have to select a specific type of polysaccharide at a molecular weight that could be used for reducing aerosol formation, i.e., aerosol formation reducing high molecular weight polysaccharide. Third, the skilled artisan would have to select an amount of the high molecular weight polysaccharide in a narrow range to be used for reducing aerosol formation, i.e., 5-200 ppm. There is nothing in Breton to guide one of ordinary skill in the art to follow this three-tiered modification scheme. Further, the skilled artisan would have to follow this three-tiered modification scheme for the purpose of reducing aerosol formation during printing, and to reduce satellite spotting around a printed image. As Breton is devoid of these teachings, this proposed modification scheme would not be obvious. As such, the Examiner is respectfully requested to reconsider and withdraw these rejections.

In view of the foregoing, the Applicants believe that claims 1-20 present allowable subject matter and the withdrawal of all rejections is respectfully requested. If any impediment to the allowance of these claims remains after consideration of the above remarks, and such impediment could be removed during a telephone interview, the Examiner is invited to telephone Brad Haymond at (541) 715-0159, so that such issues may be resolved as expeditiously as possible.

Please charge any additional fees except for Issue Fee or credit any
overpayment to Deposit Account No. 08-2025.

Dated this 19 day of June, 2003.

Respectfully submitted,



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